

WHAT IS CLAIMED IS:

1. A magneto-optical recording medium comprising:
a domain wall displacement layer for displacing
domain walls;
5 a recording layer for storing information; and
a switching layer arranged between said domain
wall displacement layer and said recording layer and
having a Curie temperature lower than those of the
latter two layers,
10 wherein said domain wall displacement layer, said
switching layer and said recording layer are coupled by
exchange coupling at temperature not higher than the
Curie temperature of said switching layer, and the
saturation magnetization of said domain wall
15 displacement layer and that of said recording layer are
anti-parallel to each other in a state of being coupled
by exchange coupling at temperature close to the Curie
temperature of said switching layer.
- 20 2. A recording medium according to claim 1,
wherein said domain wall displacement layer is formed
so that its rare earth sublattice magnetization becomes
dominant at and near the Curie temperature of said
switching layer, while said recording layer is formed
25 so that its transition metal sublattice magnetization
becomes dominant at and near the Curie temperature of
said switching layer.

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3. A recording medium according to claim 2,
wherein said domain wall displacement layer shows a
compensation temperature between its own Curie
temperature and the Curie temperature of said switching
5 layer.

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10 4. A recording medium according to claim 1,
wherein said domain wall displacement layer is formed
so that its transition metal sublattice magnetization
becomes dominant at and near the Curie temperature of
said switching layer, while said recording layer is
formed so that its rare earth sublattice magnetization
becomes dominant at and near the Curie temperature of
said switching layer.

15 5. A reproducing method to be used with a
magneto-optical recording medium according to any of
claims 1 through 4, said method comprising:

20 a step of forming a predetermined temperature
distribution having a temperature zone exceeding the
Curie temperature of said switching layer on said
magneto-optical recording medium by means of a laser
beam;

25 a step of breaking the exchange coupling between
said domain wall displacement layer and said recording
layer in a region of the temperature zone exceeding the
Curie temperature of said switching layer and

displacing a domain wall formed in said domain wall displacement layer toward the high temperature side along the temperature gradient of the temperature distribution; and

- 5 a step of detecting information stored in said recording layer, utilizing the laser beam reflected from said medium.

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